

LIBRARY
BUREAU OF THE CENSUS

census

Ref

HD

9724

.U52X

1987b

nos. 33A-

39D



PRELIMINARY REPORT
INDUSTRY SERIES

1987

Census of Manufactures

MC87-I-37C(P)
Issued April 1989

SHIP AND BOAT BUILDING, RAILROAD AND MISCELLANEOUS TRANSPORTATION EQUIPMENT

Industries 3731, 3732, 3743, 3751, 3792, 3795, and 3799

INTRODUCTION

This report presents preliminary statistics from the 1987 Census of Manufactures for those establishments classified in the industries listed above. These data will be superseded by a more comprehensive final paperbound report. The method of data collection and use of administrative data are discussed in detail in the appendix.

All dollar figures included in this report are at prices current for the year specified and, therefore, unadjusted for changes in price levels. Consequently, when making comparisons to prior years, users should take into consideration the inflation that has occurred.

The definitions of these industries are the same as those used in the 1987 Standard Industrial Classification (SIC) Manual.¹

INDUSTRY 3731, SHIP BUILDING AND REPAIRING

In the 1987 Census of Manufactures, Industry 3731, Ship Building and Repairing, had employment of 120.4 thousand. The employment figure was 28 percent below the 166.7 thousand reported in 1982.

The total value of shipments for establishments classified in this industry was \$8.5 billion. The products primary to this industry appear in table 2 and aggregated to \$8.4 billion in 1987.

¹Standard Industrial Classification Manual: 1987. For sale by Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402. Stock No. 041-001-00314-2.

The cost of materials and services used by establishments in this industry amounted to \$3.3 billion in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 3732, BOAT BUILDING AND REPAIRING

In the 1987 Census of Manufactures, Industry 3732, Boat Building and Repairing, had employment of 56.9 thousand. The employment figure was 49 percent above the 38.3 thousand reported in 1982. Compared with 1986, employment in 1987 increased 18 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was \$5.3 billion. The products primary to this industry appear in table 2 and aggregated to \$5.2 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to \$2.9 billion in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 3743, RAILROAD EQUIPMENT

In the 1987 Census of Manufactures, Industry 3743, Railroad Equipment, had employment of 21.0 thousand. The employment figure was 39 percent below the 34.5 thousand reported in 1982. Compared with 1986, employment in 1987 decreased 12 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

Address inquiries to Bureau of the Census, Industry Division, Washington, DC 20233, or call Brandy Yarbrough (301) 763-7304



U.S. Department of Commerce
BUREAU OF THE CENSUS

For sale by Superintendent of Documents, U.S. Government
Printing Office, Washington, DC 20402.

BUREAU OF THE CENSUS
LIBRARY

The total value of shipments for establishments classified in this industry was \$2.4 billion. The products primary to this industry appear in table 2 and aggregated to \$2.2 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to \$1.2 billion in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 3751, MOTORCYCLES, BICYCLES, AND PARTS

In the 1987 Census of Manufactures, Industry 3751, Motorcycles, Bicycles, and Parts, had employment of 7.1 thousand. The employment figure was 45 percent below the 13.0 thousand reported in 1982.

The total value of shipments for establishments classified in this industry was \$1.0 billion. The products primary to this industry appear in table 2 and aggregated to \$1.1 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to \$666.7 million in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 3792, TRAVEL TRAILERS AND CAMPERS

In the 1987 Census of Manufactures, Industry 3792, Travel Trailers and Campers, had employment of 17.1 thousand. The employment figure was 24 percent above the 13.8 thousand reported in 1982. Compared with 1986, employment in 1987 increased 20 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was \$1.9 billion. The products primary to this industry appear in table 2 and aggregated to \$1.9 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to \$1.2 billion in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 3795, TANKS AND TANK COMPONENTS

In the 1987 Census of Manufactures, Industry 3795, Tanks and Tank Components, had employment of 16.9 thousand. The employment figure was 7 percent below the 18.2 thousand reported in 1982. Compared with 1986,

employment in 1987 decreased 5 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was \$2.6 billion. The products primary to this industry appear in table 2 and aggregated to \$3.0 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to \$1.5 billion in 1987. Data on specific materials consumed appear in table 3.

INDUSTRY 3799, TRANSPORTATION EQUIPMENT, N.E.C.

In the 1987 Census of Manufactures, Industry 3799, Transportation Equipment, N.E.C., had employment of 15.4 thousand. The employment figure was 41 percent above the 10.9 thousand reported in 1982. Compared with 1986, employment in 1987 increased 21 percent. The 1986 data are based on the Bureau's annual survey of manufactures (ASM), which is a sample survey conducted each year between censuses.

The total value of shipments for establishments classified in this industry was \$1.7 billion. The products primary to this industry appear in table 2 and aggregated to \$1.6 billion in 1987.

The cost of materials and services used by establishments in this industry amounted to \$994.2 million in 1987. Data on specific materials consumed appear in table 3.

ABBREVIATIONS AND SYMBOLS

The following abbreviations and symbols are used in the tables in this publication:

-	Represents zero.
(D)	Withheld to avoid disclosing data for individual companies; data are included in higher level totals.
(NA)	Not available.
(NC)	Not comparable.
(S)	Withheld because estimate did not meet publication standards on the basis of either the response rate or a consistency review.
(X)	Not applicable.
(Z)	Less than half the unit shown.
do	Ditto.
n.e.c.	Not elsewhere classified.
n.s.k.	Not specified by kind.
pt.	Part.
r	Revised.
SIC	Standard Industrial Classification.

Other abbreviations, such as lb, gal, yd, doz, bbl, and s tons, are used in the customary sense.

CONTACTS FOR DATA USERS

Subject Area	Contact	Phone	Import/Export Publications	Foreign Trade Division	(301) 763-5140
Census/ASM			Industry Analy-	International Trade	(202) 377-4356
Durables	Kenneth Hansen	(301) 763-7304	sis and Fore-	Administration	
Nondurables	Michael Zampogna	(301) 763-2510	casts		
Current Indus-					
trial Reports					
Durables	Malcolm Bernhardt	(301) 763-2518			
Nondurables	Thomas Flood	(301) 763-5911			

Table 1. Historical Statistics for the Industry: 1987 and Earlier Years

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix.]

Year ¹	All establishments ³			All employees		Production workers			Value added by manufac- ture ⁴ (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expendi- tures (million dollars)	End-of- year inven- tories ⁴ (million dollars)	Ratios	
	Com- panies ² (no.)	Total (no.)	With 20 employ- ees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						Special- ization (per- cent)	Cover- age (per- cent)
INDUSTRY 3731, SHIP BUILDING AND REPAIRING															
1987 Census	(NA)	585	288	120.4	3 220.1	90.8	178.6	2 168.5	\$5 226.8	3 303.9	\$8 530.7	273.0	1 055.4	(NA)	(NA)
1986 ASM	(NA)	(NA)	(NA)	120.6	3 181.3	90.3	179.3	2 147.6	\$5 426.1	3 413.8	\$8 839.9	214.2	878.5	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	130.3	3 315.9	99.0	194.0	2 278.0	\$5 739.8	3 618.0	\$9 357.7	296.0	956.3	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	132.7	3 332.0	102.5	203.4	2 329.5	\$5 867.6	3 778.1	\$9 643.6	342.8	974.7	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	141.0	3 294.8	107.0	208.4	2 315.3	\$5 572.0	3 919.0	\$9 487.1	304.8	873.5	(NA)	(NA)
1982 Census	617	689	377	166.7	3 737.7	130.7	259.4	2 771.2	\$6 379.4	4 587.8	\$10 967.2	438.4	1 353.6	99	99
1981 ASM	(NA)	(NA)	(NA)	178.9	3 766.9	142.2	287.5	2 807.9	\$6 303.7	4 697.6	\$11 001.3	379.9	1 516.3	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	177.3	3 360.4	141.8	281.4	2 467.0	\$5 337.6	3 930.9	\$9 268.5	267.5	1 541.2	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	171.0	2 927.6	136.7	268.1	2 131.8	\$4 586.9	3 151.6	\$7 738.5	235.7	1 303.9	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	174.1	2 647.5	138.4	268.4	1 936.2	\$4 106.5	2 836.8	\$6 943.4	189.4	1 269.1	(NA)	(NA)
1977 Census	542	605	314	176.4	2 494.0	139.9	277.2	1 807.4	\$3 825.0	2 670.1	\$6 495.1	161.3	1 072.5	97	99
1976 ASM	(NA)	(NA)	(NA)	166.3	2 219.5	132.1	261.6	1 618.6	\$3 287.3	2 610.2	\$5 895.8	354.6	1 053.1	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	166.9	1 995.6	133.4	253.9	1 460.8	\$2 923.2	2 692.1	\$5 615.3	297.9	1 137.3	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	162.2	1 769.5	129.0	249.5	1 291.0	\$2 547.3	2 264.1	\$4 825.0	215.5	1 032.5	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	152.1	1 560.2	120.6	239.0	1 134.2	\$2 216.1	1 742.6	\$3 958.7	131.0	932.1	(NA)	(NA)
1972 Census	415	455	277	144.6	1 422.3	117.7	233.4	1 053.2	\$1 881.3	1 399.7	\$3 281.0	142.0	721.3	98	98
INDUSTRY 3732, BOAT BUILDING AND REPAIRING															
1987 Census	(NA)	2 114	428	56.9	1 041.6	46.9	93.8	762.1	2 430.9	2 932.3	5 324.7	133.3	691.2	(NA)	(NA)
1986 ASM	(NA)	(NA)	(NA)	48.1	892.4	39.0	78.8	643.5	1 804.2	2 239.7	4 048.7	87.8	547.8	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	45.1	786.8	35.7	69.3	548.5	1 466.7	2 028.1	3 496.4	79.9	537.3	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	46.3	770.4	38.5	73.8	555.1	1 492.8	1 962.9	3 452.4	90.0	553.0	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	38.9	634.1	32.0	60.4	455.2	1 252.3	1 451.5	2 690.1	40.1	487.2	(NA)	(NA)
1982 Census	1 834	1 877	385	38.3	588.1	30.8	59.9	422.8	1 129.2	1 234.9	2 359.2	57.6	463.5	98	96
1981 ASM	(NA)	(NA)	(NA)	40.7	562.2	33.0	63.2	401.3	1 057.3	1 215.0	2 247.9	65.9	427.4	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	41.3	517.0	33.1	62.2	369.9	930.4	1 157.2	2 102.2	61.9	377.9	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	46.5	532.3	37.8	72.0	385.5	998.5	1 251.9	2 233.4	62.5	393.5	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	49.9	520.7	41.1	77.4	382.8	1 015.8	1 161.5	2 162.1	60.0	380.7	(NA)	(NA)
1977 Census	2 148	2 190	422	43.8	445.8	35.6	68.4	324.7	856.3	984.7	1 822.6	42.3	338.0	98	96
1976 ASM	(NA)	(NA)	(NA)	40.6	385.2	33.3	62.2	296.8	745.1	871.0	1 620.6	32.4	257.1	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	35.4	309.5	28.6	52.8	234.7	629.0	671.7	1 321.0	31.3	197.8	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	38.2	274.1	31.0	57.6	207.1	514.0	560.3	1 099.8	24.4	189.8	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	44.3	311.5	36.7	67.8	231.2	563.6	628.0	1 181.5	28.5	240.5	(NA)	(NA)
1972 Census	1 726	1 777	368	40.6	281.3	33.6	64.0	212.4	516.8	552.0	1 048.2	37.2	209.7	97	96
INDUSTRY 3743, RAILROAD EQUIPMENT															
1987 Census	(NA)	169	91	21.0	616.8	13.7	28.2	343.7	1 283.9	1 192.7	2 412.1	41.5	724.0	(NA)	(NA)
1986 ASM	(NA)	(NA)	(NA)	24.0	687.4	16.1	30.6	421.0	1 198.1	1 256.3	2 613.0	58.4	626.6	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	27.6	762.2	18.9	35.9	475.9	1 286.1	1 391.4	2 735.5	79.2	732.6	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	29.5	789.7	20.5	38.7	492.6	1 485.9	1 595.0	3 021.2	123.4	814.7	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	25.0	634.8	16.2	29.6	367.7	1 036.5	1 176.1	2 248.1	140.4	703.8	(NA)	(NA)
1982 Census	158	200	107	34.5	790.4	22.8	38.9	478.7	1 491.8	1 770.5	3 456.6	142.3	775.7	85	96
1981 ASM	(NA)	(NA)	(NA)	48.6	1 094.1	34.1	62.1	728.1	2 301.6	2 953.2	5 419.9	139.5	920.2	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	65.2	1 365.3	49.0	90.4	985.2	3 217.0	4 384.4	7 808.7	167.8	1 151.1	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	72.0	1 373.8	56.4	108.4	1 017.3	3 462.2	4 416.3	7 756.4	154.3	1 440.2	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	62.1	1 074.7	47.8	91.3	768.1	2 480.8	3 135.4	5 459.5	115.5	1 118.6	(NA)	(NA)
1977 Census	145	201	118	56.3	888.6	42.6	79.4	619.9	1 882.8	2 386.2	4 278.3	80.4	850.6	91	94
1976 ASM	(NA)	(NA)	(NA)	50.5	740.2	37.6	69.4	510.0	1 454.8	2 077.0	3 615.6	67.5	756.8	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	59.6	797.9	46.3	87.0	578.4	1 566.4	2 625.3	4 221.5	73.4	868.2	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	60.1	735.4	47.6	92.5	550.0	1 602.6	2 165.1	3 538.9	67.7	878.7	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	52.8	596.0	40.6	78.3	424.6	1 245.5	1 563.1	2 771.2	47.4	555.1	(NA)	(NA)
1972 Census	127	163	103	50.8	529.1	38.4	72.7	371.9	1 113.3	1 134.2	2 446.2	55.3	459.3	92	95
INDUSTRY 3751, MOTORCYCLES, BICYCLES, AND PARTS															
1987 Census	(NA)	242	55	7.1	152.5	5.5	11.6	107.0	355.5	666.7	1 037.5	30.4	131.3	(NA)	(NA)
1986 ASM	(NA)	(NA)	(NA)	7.9	169.4	6.3	13.7	123.4	430.1	\$577.0	1 032.0	21.4	164.1	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	9.2	168.7	7.4	15.3	121.5	402.3	644.6	1 044.0	23.4	152.0	(NA)	(NA)
1984 ASM	(NA)	(NA)	(NA)	10.4	187.6	8.5	16.7	134.5	438.7	697.8	1 152.6	20.3	170.6	(NA)	(NA)
1983 ASM	(NA)	(NA)	(NA)	12.2	238.9	9.9	20.3	178.0	545.7	874.6	1 436.1	26.5	282.3	(NA)	(NA)
1982 Census	269	273	67	13.0	224.9	10.4	19.0	168.8	402.5	888.9	1 341.1	23.1	285.5	85	96
1981 ASM	(NA)	(NA)	(NA)	13.9	222.5	11.2	21.5	168.1	426.7	904.0	1 344.0	26.8	278.2	(NA)	(NA)
1980 ASM	(NA)	(NA)	(NA)	15.2	217.2	12.7	24.0	165.4	475.1	867.5	1 336.7	22.0	280.0	(NA)	(NA)
1979 ASM	(NA)	(NA)	(NA)	16.9	225.6	14.4	28.2	178.7	454.3	929.5	1 374.8	29.5	295.2	(NA)	(NA)
1978 ASM	(NA)	(NA)	(NA)	17.2	199.8	14.7	26.8	152.9	428.1	824.0	1 224.6	27.2	259.7	(NA)	(NA)
1977 Census	343	350	63	15.6	168.9	13.3	24.6	129.9	369.8	660.1	1 007.6	24.1	226.5	84	97
1976 ASM	(NA)	(NA)	(NA)	13.7	151.2	11.4	20.5	111.4	284.0	516.2	790.5	16.5	184.7	(NA)	(NA)
1975 ASM	(NA)	(NA)	(NA)	14.0	147.6	11.1	20.7	106.8	254.4	501.6	785.7	15.8	176.6	(NA)	(NA)
1974 ASM	(NA)	(NA)	(NA)	19.1	171.8	16.2	30.6	130.6	410.9	590.4	958.6	24.9	231.8	(NA)	(NA)
1973 ASM	(NA)	(NA)	(NA)	17.5	145.8	15.1	29.1	113.0	309.3	421.0	721.7	15.9	140.8	(NA)	(NA)
1972 Census	219	222	52	17.6	139.6	15.0	29.1	106.2	315.2	373.0	659.5	16.0	128.8	81	95
INDUSTRY 3792, TRAVEL TRAILERS AND CAMPERS															
1987 Census	(NA)	424	150	17.1	315.0	13.7	25.1	213.2	691.0	1 181.7	1 862.5	16.0	174.7	(NA)	(NA)
1986 ASM	(NA)	(NA)	(NA)	14.2	257.7	11.0	20.4	166.3	506.7	916.5	1 424.8	18.5	152.6	(NA)	(NA)
1985 ASM	(NA)	(NA)	(NA)	13.5	229.2	10.9	20.5	155.7	478.8	874.2	1 354.2	14.5	133.8	(NA)	(NA)

Table 1. Historical Statistics for the Industry: 1987 and Earlier Years—Con.

[Excludes data for auxiliaries. For meaning of abbreviations and symbols, see introductory text. For explanation of terms, see appendix.]

Year ¹	Companies ² (no.)	All establishments ³		All employees		Production workers			Value added by manufac- ture ⁴ (million dollars)	Cost of materials (million dollars)	Value of shipments (million dollars)	New capital expendi- tures (million dollars)	End-of- year invento- ries ⁴ (million dollars)	Ratios	
		Total (no.)	With 20 employ- ees or more (no.)	Number (1,000)	Payroll (million dollars)	Number (1,000)	Hours (millions)	Wages (million dollars)						Spe- cial- ization (per- cent)	Cover- age (per- cent)
INDUSTRY 3792, TRAVEL TRAILERS AND CAMPERS—Con.															
1977 Census ----	775	861	266	26.3	275.7	21.8	40.7	197.1	510.3	1 068.4	1 582.4	31.0	193.6	88	90
1976 ASM -----	(NA)	(NA)	(NA)	24.8	238.4	20.3	40.5	169.7	490.4	1 034.5	1 491.2	23.2	180.0	(NA)	(NA)
1975 ASM -----	(NA)	(NA)	(NA)	21.4	195.8	17.8	33.7	141.3	362.3	783.8	1 157.9	17.2	143.7	(NA)	(NA)
1974 ASM -----	(NA)	(NA)	(NA)	20.9	173.4	17.0	33.6	121.6	297.0	545.9	861.2	12.0	135.9	(NA)	(NA)
1973 ASM -----	(NA)	(NA)	(NA)	33.8	238.9	28.6	51.0	174.0	420.8	757.7	1 181.5	26.3	150.4	(NA)	(NA)
1972 Census ----	945	1 030	385	37.1	266.3	31.1	57.8	195.9	479.9	884.1	1 342.2	35.2	161.7	92	94
INDUSTRY 3795, TANKS AND TANK COMPONENTS															
1987 Census ----	(NA)	57	40	16.9	512.0	11.4	23.4	320.3	993.4	1 498.8	2 592.0	41.2	754.5	(NA)	(NA)
1986 ASM -----	(NA)	(NA)	(NA)	17.8	548.1	11.6	23.6	342.2	1 073.7	1 124.5	2 010.1	28.5	806.0	(NA)	(NA)
1985 ASM -----	(NA)	(NA)	(NA)	21.2	578.8	14.1	26.6	344.3	1 055.2	1 761.2	2 887.5	32.4	615.3	(NA)	(NA)
1984 ASM -----	(NA)	(NA)	(NA)	19.2	540.6	12.5	24.3	320.3	1 291.4	1 945.9	3 314.0	81.6	660.3	(NA)	(NA)
1983 ASM -----	(NA)	(NA)	(NA)	22.4	579.6	14.7	26.6	344.7	1 397.2	2 133.1	3 418.5	88.3	963.2	(NA)	(NA)
1982 Census ----	38	44	37	18.2	475.9	12.6	23.3	291.1	1 157.7	1 506.2	2 351.0	114.7	919.6	(D)	79
1981 ASM -----	(NA)	(NA)	(NA)	14.2	328.0	10.5	18.9	221.6	1 043.1	826.7	1 657.6	35.1	588.9	(NA)	(NA)
1980 ASM -----	(NA)	(NA)	(NA)	13.3	284.0	10.1	19.3	199.4	647.6	862.4	1 419.2	36.8	373.3	(NA)	(NA)
1979 ASM -----	(NA)	(NA)	(NA)	13.4	233.7	10.9	19.3	171.4	531.1	598.1	1 030.3	23.9	296.6	(NA)	(NA)
1978 ASM -----	(NA)	(NA)	(NA)	13.4	225.0	10.7	20.8	166.9	379.9	628.2	1 092.5	17.1	190.8	(NA)	(NA)
1977 Census ----	20	24	18	12.4	208.5	10.0	19.8	156.2	437.6	590.0	934.2	13.2	287.8	92	82
1976 ASM -----	(NA)	(NA)	(NA)	9.8	146.0	7.7	15.5	110.9	305.7	467.3	720.3	9.4	171.2	(NA)	(NA)
1975 ASM -----	(NA)	(NA)	(NA)	8.4	112.7	6.8	13.5	86.0	258.4	279.5	504.0	2.3	118.4	(NA)	(NA)
1974 ASM -----	(NA)	(NA)	(NA)	7.7	103.6	5.9	12.2	75.6	205.4	195.1	362.3	1.5	83.5	(NA)	(NA)
1973 ASM -----	(NA)	(NA)	(NA)	6.3	75.4	5.0	10.1	55.4	135.8	187.9	321.8	3.5	36.9	(NA)	(NA)
1972 Census ----	18	22	15	5.9	65.0	4.6	9.0	46.9	111.7	150.1	272.2	3.1	35.8	95	77
INDUSTRY 3799, TRANSPORTATION EQUIPMENT, N.E.C.															
1987 Census ----	(NA)	611	171	15.4	307.7	11.0	21.2	164.5	683.2	994.2	1 654.2	38.5	380.0	(NA)	(NA)
1986 ASM -----	(NA)	(NA)	(NA)	12.7	239.2	9.1	17.3	126.8	516.1	784.0	1 306.2	⁶ 29.0	217.1	(NA)	(NA)
1985 ASM -----	(NA)	(NA)	(NA)	12.6	215.5	8.8	16.6	125.5	490.2	705.8	1 180.2	⁶ 30.2	219.6	(NA)	(NA)
1984 ASM -----	(NA)	(NA)	(NA)	12.1	211.5	8.7	17.1	130.1	538.7	678.8	1 196.9	20.8	213.4	(NA)	(NA)
1983 ASM -----	(NA)	(NA)	(NA)	12.8	205.4	9.2	17.2	118.3	438.1	643.8	1 073.0	16.5	201.8	(NA)	(NA)
1982 Census ----	408	425	120	10.9	181.2	7.5	14.4	103.7	377.0	515.6	895.2	15.0	171.9	93	82
1981 ASM -----	(NA)	(NA)	(NA)	8.6	124.0	5.9	11.8	72.5	224.9	402.0	620.7	⁶ 15.1	109.4	(NA)	(NA)
1980 ASM -----	(NA)	(NA)	(NA)	9.3	124.1	6.6	13.0	74.4	208.0	397.4	607.9	18.0	105.1	(NA)	(NA)
1979 ASM -----	(NA)	(NA)	(NA)	10.7	129.0	8.0	15.5	83.2	211.8	472.5	683.0	15.2	107.8	(NA)	(NA)
1978 ASM -----	(NA)	(NA)	(NA)	11.4	122.7	8.4	15.1	79.3	248.8	441.8	687.0	⁶ 19.6	112.2	(NA)	(NA)
1977 Census ----	408	429	109	10.3	106.6	7.4	13.3	62.6	232.7	384.9	620.9	9.8	109.4	94	79
1976 ASM -----	(NA)	(NA)	(NA)	15.2	154.1	11.6	20.0	95.8	379.8	538.9	905.3	15.2	167.9	(NA)	(NA)
1975 ASM -----	(NA)	(NA)	(NA)	14.1	131.1	10.5	19.6	83.7	312.7	483.0	808.7	15.3	155.8	(NA)	(NA)
1974 ASM -----	(NA)	(NA)	(NA)	15.8	124.6	12.2	20.5	81.7	320.9	459.7	764.1	26.2	176.9	(NA)	(NA)
1973 ASM -----	(NA)	(NA)	(NA)	18.0	135.6	13.8	27.7	90.3	293.4	439.1	706.3	16.9	153.5	(NA)	(NA)
1972 Census ----	444	501	192	16.1	117.2	13.4	25.2	82.0	232.1	434.2	654.6	16.9	113.5	93	74

Note: Establishments of single unit companies with up to 20 employees (cutoff varied by industry) were excluded from the mail portion of the census. Data for these establishments (and a small number of larger establishments whose reports were not received at the time the data were tabulated) were estimated based on administrative-record information from other agencies in conjunction with industry averages. These establishments accounted for the following percent of total value of shipments: SIC 3731, 2%; SIC 3732, 13%; SIC 3743, 4%; SIC 3751, 12%; SIC 3792, 10%; SIC 3795, 1%; and SIC 3799, 17%.

¹In annual survey of manufactures (ASM) years, data are estimates based on a representative sample of establishments canvassed annually and may differ from results of a complete canvass of all establishments. ASM publication shows percentage standard errors. Unless otherwise noted, for data prior to 1972, see 1972 Census of Manufactures, vol. II, table 1a of the Industry chapter.

²For the census, a company is defined as a business organization consisting of one establishment or more under common ownership or control.

³Includes establishments with payroll at any time during year.

⁴Beginning with the 1982 Census of Manufactures, all respondents were requested to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior Censuses and annual surveys of manufactures in which respondents were permitted to value their inventories using any generally accepted accounting method. Consequently, inventories and value added by manufacture are not comparable to prior-year data.

⁵Data in value of shipments column represent value of work done rather than value of shipments. Consequently, formula for computing value added by manufacture was modified to exclude any change between beginning- and end-of-year inventories.

⁶Estimates for new capital expenditures have associated standard error of 15 percent or more and may be of limited reliability. Estimates for other data items are of acceptable reliability.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text.]

1987 product code	Product	1987			1982		
		Number of companies with shipments of \$100,000 or more	Product shipments ¹		Number of companies with shipments of \$100,000 or more	Product shipments ¹	
			Quantity ²	Value (million dollars)		Quantity ²	Value (million dollars)
3731- --	SHIP BUILDING AND REPAIRING						
	Total	(NA)	(X)	8 376.8	(NA)	(X)	10 654.5
37311 --	Nonpropelled ships, new construction	(NA)	(X)	108.1	(NA)	(X)	1 336.6
	Military and nonmilitary:						
37311 01	Hopper barges number..	7	(S)	29.2	(NA)	(NA)	(³)
37311 02	Tank barges do..	4	(S)	6.8	(NA)	(NA)	(³)
37311 03	Covered cargo barges do..	3	(D)	(NA)	(NA)	(NA)	(³)
37311 04	Deck barges do..	10	(S)	19.4	(NA)	(NA)	(³)
37311 05	Dredges do..	1	(D)	(NA)	(NA)	(NA)	(³)
37311 06	Floating docks do..	6	(S)	10.0	(NA)	(NA)	(³)
37311 07	Drilling/production platforms do..	3	(D)	(NA)	16	**178	818.7
37311 09	Other do..	6	(S)	14.5	57	(S)	3506.2
37311 00	Nonpropelled ships, new construction, n.s.k.	(NA)	(X)	2.7	(NA)	(X)	11.3
37312 --	Self-propelled ships, U.S. military, new construction:						
37312 00	U.S. military, including combat ships, troop transport vessels, fleet auxiliaries, service craft, etc. (including hovercraft and military boats)	25	(X)	4 781.8	15	(X)	4 094.5
37313 --	Self-propelled ships, nonmilitary, new construction	(NA)	(X)	497.1	(NA)	(X)	1 872.0
37313 15	Yachts, 65 ft or more in length (requires a professional crew as specified by the Coast Guard) number..	9	(S)	140.5	11	**88	48.2
37313 24	Dry bulk carriers do..	-	(X)	-	2	(X)	(⁴)
37313 25	Container ships (lift on/lift off) and trailer ships (roll on/roll off) do..	1	(X)	(D)	7	(X)	(⁴)
37313 26	Tankers do..	1	(X)	(D)	4	(X)	(⁴)
37313 32	Fire, patrol, and pilot vessels do..	-	(X)	-	3	(X)	(⁴)
37313 33	Support vessels for offshore drilling and mining do..	4	(X)	4.4	28	(X)	565.1
37313 35	Self-propelled mobile drilling/production platforms do..	-	(X)	-	3	(X)	(⁴)
	Commercial fishing vessels:						
37313 41	Seiners number..	5	**14	14.7	12	*70	98.4
37313 43	Trawlers do..	17	(S)	96.2	11	*63	34.2
37313 49	Other do..				20	**51	58.4
	Tugboats and towboats:						
37313 51	Harbor and offshore tugs number..	8	(S)	20.2	16	*71	95.8
37313 53	River towboats do..				19	*134	145.5
37313 55	Integrated tug/barge combination do..				3	(S)	20.2
37313 21	Ferryboats do..	9	(S)	38.2	(NA)	(X)	(⁵)
37313 29	Other ships do..	18	(X)	113.7	24	(X)	4,5774.3
37313 00	Self-propelled ships, new construction, nonmilitary, n.s.k.	(NA)	(X)	19.6	(NA)	(X)	31.2
37314 --	Ship repair, military	(NA)	(X)	1 929.7	(NA)	(X)	1 571.2
37314 41	Conversions and reconversions do..	35	(X)	360.5	24	(X)	407.3
37314 49	All other repairs do..	67	(X)	1 566.6	64	(X)	1 158.2
37314 00	Ship repair, military, n.s.k.	(NA)	(X)	2.6	(NA)	(X)	5.8
37316 --	Ship repair, nonmilitary	(NA)	(X)	806.2	(NA)	(X)	1 592.2
37316 01	Conversions and reconversions do..	34	(X)	144.4	(NA)	(X)	1 579.2
37316 02	All other repairs do..	142	(X)	654.8			
37316 00	Ship repair, nonmilitary, n.s.k.	(NA)	(X)	6.9	(NA)	(X)	12.9
37310 --	Ship building and repairing, n.s.k.	(NA)	(X)	253.8	(NA)	(X)	188.0
37310 00	Ship building and repairing, n.s.k., typically for establishments with 20 employees or more (see note)	(NA)	(X)	144.6	(NA)	(X)	120.8
37310 02	Ship building and repairing, n.s.k., typically for establishments with less than 20 employees (see note)	(NA)	(X)	109.2	(NA)	(X)	67.2
3732- --	BOAT BUILDING AND REPAIRING						
	Total	(NA)	(X)	5 192.1	(NA)	(X)	2 307.4
37322 --	Outboard motorboats, including commercial and military, all types, including prefabricated kits (excludes sailboats with auxiliary power and lifeboats)	(NA)	(X)	1 143.6	(NA)	(X)	345.0
	Wood or metal:						
37322 01	Runabouts number..	16	**17	508	26	**124	389
37322 02	Utility do..	12	(S)	32.0	10	**22	294
37322 05	Center consoles do..	5	(⁶)	(⁶)	(NA)	(⁷)	(⁷)
37322 07	Bass boats do..	11	(S)	78.8	(NA)	(⁷)	(⁷)
37322 09	Cabin cruisers do..	6	(⁶)	(⁶)	1	(D)	(⁷)
37322 11	Pontoon boats do..	22	**18	793	(NA)	(⁷)	(⁷)
37322 13	Other do..	10	(S)	73.0	16	76	195
	Plastics (reinforced), fiberglass:						
37322 21	Runabouts number..	61	(S)	320.1	(NA)	**45	133
37322 23	Utility do..	8	(S)	15.2	8	**968	5.0
37322 25	Cabin cruisers do..	28	(S)	105.9	12	**2	287
37322 27	Center consoles do..	38	(S)	152.1	(NA)	(NA)	(⁹)
37322 28	Bass boats do..	45	(S)	219.8	(NA)	(⁹)	(⁹)
37322 29	Other do..	12	(S)	27.3	(NA)	(S)	8 929.3
37322 00	Outboard motorboats, n.s.k.	(NA)	(X)	41.7	(NA)	(X)	47.6
37323 --	Inboard motorboats	(NA)	(X)	1 365.7	(NA)	(X)	522.3
	Runabouts:						
37323 03	Less than 26 ft (7.92 m) in length number..	38	(S)	378.9	(NA)	(¹⁰)	(¹⁰)
37323 05	26 ft (7.92 m) or more in length do..				(NA)	(¹⁰)	(¹⁰)
	Cabin cruisers:						
37323 07	Less than 26 ft (7.92 m) in length number..	11	**709	11.0	(NA)	(¹⁰)	(¹⁰)
37323 09	26 ft (7.92 m) to less than 40 ft (12.19 m) in length do..	42	7 676	571.3	(NA)	(¹⁰)	(¹⁰)
37323 13	40 ft (12.19 m) to less than 65 ft (19.81 m) in length do..	26	1 063	267.8	(NA)	(¹⁰)	(¹⁰)
37323 15	65 ft (19.81 m) or more in length (professional crew not required by Coast Guard) do..	12	(S)	14.2	(NA)	(¹⁰)	(¹⁰)

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982		
		Number of companies with shipments of \$100,000 or more	Product shipments ¹		Number of companies with shipments of \$100,000 or more	Product shipments ¹	
			Quantity ²	Value (million dollars)		Quantity ²	Value (million dollars)
3732--	BOAT BUILDING AND REPAIRING—Con.						
37323 --	Inboard motorboats—Con.						
37323 17	Houseboats number..	5	(S)	5.0	(NA)	¹⁰ 16 674	¹⁰ 486.2
37323 19	Other do..	14	(S)	55.5	(NA)	(X)	36.1
37323 00	Inboard motorboats, n.s.k.	(NA)	(X)	60.9			
37324 --	Inboard-outdrive boats	(NA)	(X)	1 472.5	(NA)	(X)	459.9
37324 01	Houseboats number..	7	(S)	91.7	11	^{*1} 447	23.7
37324 03	Runabouts do..	53	60 324	632.8			
37324 05	Cabin cruisers do..	34	25 758	511.3	(NA)	^{*32} 563	429.3
37324 07	Center consoles do..	10	^{**1} 245	23.5			
37324 09	Other do..	12	(S)	194.9	(NA)	(X)	6.9
37324 00	Inboard-outdrive boats, n.s.k.	(NA)	(X)	18.4	(NA)	(X)	368.8
37327 --	Boats, n.e.c. (sailboats, rowboats, canoes, etc.)	(NA)	(X)	283.4	(NA)	(X)	
37327 01	Sailboats with or without auxiliary motor:						
37327 03	Not more than 4 m (13.12 ft) in length number..	7	(S)	7.4			
37327 05	More than 4 m (13.12 ft) but not more than 6.5 m (21.33 ft) in length do..	13	(S)	33.8	(NA)	^{**24} 683	240.4
37327 07	More than 6.5 m (21.33 ft) but not more than 9.0 m (29.53 ft) in length do..	21	(S)	59.5			
37327 09	More than 9.0 m (29.53 ft) but not more than 12.0 m (39.03 ft) in length do..	22	(S)	59.9			
37327 11	Canoes:						
37327 13	Plastics number..	7	^{**27} 453	11.6	16	^{*74} 796	23.0
37327 15	Metal do..	6	(S)	16.0			
37327 19	Other do..	4	(S)	3.9			
37327 00	All other boats, n.e.c. do..	24	^{**21} 948	21.6	44	^{**36} 781	78.3
37328 --	Boat repair, military and nonmilitary:						
37328 00	Boat repair, military and nonmilitary	(NA)	(X)	203.0	(NA)	(X)	271.2
37320 --	Boat building and repairing, n.s.k.	(NA)	(X)	723.8	(NA)	(X)	340.1
37320 00	Boat building and repairing, n.s.k., typically for establishments with 10 employees or more (see note)	(NA)	(X)	540.4	(NA)	(X)	238.5
37320 02	Boat building and repairing, n.s.k., typically for establishments with less than 10 employees (see note)	(NA)	(X)	183.4	(NA)	(X)	101.6

1987 product code	Product	1987			1982			
		Number of companies with shipments of \$100,000 or more	Product shipments ¹		Number of companies with shipments of \$100,000 or more	Product shipments ¹		
			Quantity ²	Value (million dollars)		Quantity ²	Weight ² (thousand short tons)	Value (million dollars)
3743- --	RAILROAD EQUIPMENT							
	Total -----	(NA)	(X)	2 151.3	(NA)	(X)	(X)	2 878.9
37431 --	Locomotives, both new and rebuilt, and parts -----	(NA)	(X)	882.5	(NA)	(X)	(X)	(D)
	Locomotives:							
37431 30	All types, except mining ----- number..	10	(D)	(D)	8	(D)	(D)	(D)
37431 60	Mining type (including both new and rebuilt) (for additional detail, see Current Industrial Report MA-35F, Mining Machinery and Mineral Processing Equipment) -----	5	(X)	12.5	7	225	(S)	22.8
	Parts for locomotives:							
37431 11	Airbrake equipment -----	5	(X)	(D)	8	(X)	(X)	56.8
37431 12	Other brake equipment -----	}	(X)	424.1	30	(X)	(X)	(D)
37431 15	Truck assemblies -----							
37431 17	Hooks and other coupling devices, buffers, and parts thereof -----							
37431 18	Other locomotive parts, except wheels -----							
37431 00	Locomotives, new and rebuilt, and parts, n.s.k. -----	(NA)	(X)	8.0	(NA)	(X)	(X)	(D)
37432 --	Passenger and freight train cars, new (excluding parts) -----	(NA)	(X)	514.9	(NA)	(X)	(X)	(D)
	Freight train cars, new:							
37432 11	Box (AAR types A, B) ----- number..	6	(S)	38.1	3	(¹¹)	(D)	(¹¹)
37432 15	Flat (AAR types F, V) ----- do..	7	(S)	95.0	4	(¹¹)	(D)	(¹¹)
37432 25	Gondola (AAR types E, G) ----- do..	3	(D)	(D)	7	3 430	54.1	136.9
37432 33	Hopper, covered (AAR types L, O) ----- do..	}	(S)	180.4	11	4 484	(S)	208.5
37432 31	Hopper, open (AAR types H, J) ----- do..							
37432 31	Hopper, open (AAR types H, J) ----- do..							
37432 41	Tank (AAR type T) ----- do..							
	Other freight train cars, including refrigerator cars and industrial railcars:	6	(S)	87.3	6	¹¹⁷ 203	(S)	¹¹³ 777.9
37432 50	Suitable for common carrier service (including caboose) ----- number..	4	^{*2} 516	90.2	8	(S)	12.5	72.3
37432 52	Not suitable for common carrier service ----- do..	-	-	-	5	^{**213}	(S)	11.2
37432 63	Passenger train cars, new ----- do..	3	(D)	(D)	2	(D)	(D)	(D)
37432 00	Passenger and freight train cars, new, n.s.k. -----	(NA)	(X)	2.1	(NA)	(X)	(X)	2.7
37433 --	Street, subway, trolley, and rapid transit cars, all rebuilt railcars, and parts for all railcars -----	(NA)	(X)	679.8	(NA)	(X)	(X)	663.7
37433 01	Rebuilt passenger and freight train cars ----- number..	7	(S)	115.3	12	15 866	(D)	31.7
37433 02	Self-propelled streetcars, subway cars, rapid transit cars, trolley buses, etc. ----- do..	}	(S)	191.1	3	(12)	(12)	(12)
37433 03	Nonself-propelled streetcars, subway cars, rapid transit cars, trolley buses, etc. ----- do..							
37433 04	Other work and service railroad vehicles (excluding locomotive cranes) ----- do..							
		6	(S)	36.9	6	¹²⁹⁹⁷	(S)	¹²² 16.9

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982			
		Number of companies with shipments of \$100,000 or more	Product shipments¹		Number of companies with shipments of \$100,000 or more	Product shipments¹		
			Quantity²	Value (million dollars)		Quantity²	Weight² (thousand short tons)	Value (million dollars)
3743- --	RAILROAD EQUIPMENT—Con.							
37433 --	Street, subway, trolley, and rapid transit cars, all rebuilt railcars, and parts for all railcars—Con.							
	Parts and accessories for railroad and streetcars:							
37433 11	Airbrake equipment	8	(X)	65.8	11	(X)	(X)	89.7
37433 12	Other brake equipment	10	(X)	16.3	47	(X)	(X)	323.2
37433 13	Truck assemblies	7	(X)	7.9				
37433 14	Hooks and other coupling devices, buffers, and parts thereof	9	(X)	43.9				
37433 15	Other railroad and streetcar parts and accessories	41	(X)	185.6				
37433 00	Street, subway, trolley, and rapid transit cars, all rebuilt railcars, and parts for all railcars, n.s.k.	(NA)	(X)	17.1	(NA)	(X)	(X)	2.1
37430 --	Railroad equipment, n.s.k.	(NA)	(X)	74.1	(N)	(X)	(X)	63.1
37430 00	Railroad equipment, n.s.k., typically for establishments with 20 employees or more (see note)	(NA)	(X)	30.4	(NA)	(X)	(X)	45.4
37430 02	Railroad equipment, n.s.k., typically for establishments with less than 20 employees (see note)	(NA)	(X)	43.7	(NA)	(X)	(X)	17.7
1987 product code	Product	1987			1982			
		Number of companies with shipments of \$100,000 or more	Product shipments¹		Number of companies with shipments of \$100,000 or more	Product shipments¹		
			Quantity²	Value (million dollars)		Quantity²	Value (million dollars)	
3751- --	MOTORCYCLES, BICYCLES, AND PARTS							
	Total	(NA)	(X)	1 140.0	(NA)	(X)	1 143.1	
37511 --	Bicycles and parts (excluding children's 2-wheel sidewalk cycles with solid or semipneumatic tires)	(NA)	(X)	524.9	(NA)	(X)	601.6	
	Bicycles, complete, with both wheels more than 65 cm (25.6 in.) in diameter:							
37511 01	Single speed	8	*703	47.7	8	*347.9	23.5	
37511 02	Three speed	6	(S)	10.7	6	*608.8	43.3	
37511 03	Five speed	5	(S)	5.8	2	(13)	(13)	
37511 04	Ten speed	8	2 367.5	141.5	7	*1 889.3	160.8	
37511 05	More than ten speed	8	(S)	55.7	6	13**389.1	1341.7	
37511 06	Bicycles, complete, with both wheels not more than 65 cm (25.6 in.) in diameter	6	*2 971.0	180.6	4	*2 779.2	206.1	
37511 09	Other cycles, including unicycles and adult tricycles	3	6.7	1.5	7	**74.1	21.1	
	Parts for bicycles, including motorbike parts which are interchangeable with cycle parts:							
37511 10	Frames, forks, and parts thereof	5	(X)	5.0	29	(X)	104.6	
37511 12	Wheel rims and spokes	6	(X)	7.2				
37511 13	Hubs other than coaster braking hubs and hub brakes, and freewheel sprocket wheels	2	(X)	(14)				
37511 14	Brakes, including coaster braking hubs and hub brakes, and parts thereof	2	(X)	.7				
37511 15	Seats (saddles)	5	(X)	15.9				
37511 16	Pedals and crankgear and parts thereof	3	(X)	15.7				
37511 19	Other	12	(X)	1425.9				
37511 00	Bicycles and parts, n.s.k.	(NA)	(X)	10.8	(NA)	(X)	.4	
37512 --	Motorcycles, motorbikes, motor scooters, mopeds, and parts	(NA)	(X)	495.3	(NA)	(X)	480.8	
37512 01	Motorcycles, including 3-wheel (excluding sidecars); trail vehicles; motor scooters; motorbikes; and mopeds	6	(D)	(D)	7	202.9	358.7	
	Parts for motorcycles (including sidecars), motorbikes, motor scooters, and mopeds including bicycle engines, excluding motorbike parts which are interchangeable with bicycle parts:							
37512 06	Seats (saddles)	6	(X)	12.6	54	(X)	114.0	
37512 07	Other	19	(X)	(D)				
37512 00	Motorcycles and parts, n.s.k.	(NA)	(X)	.2	(NA)	(X)	8.0	
37510 --	Motorcycles, bicycles, and parts, n.s.k.	(NA)	(X)	119.9	(NA)	(X)	60.8	
37510 00	Motorcycles, bicycles, and parts, n.s.k., typically for establishments with 10 employees or more (see note)	(NA)	(X)	22.3	(NA)	(X)	29.2	
37510 02	Motorcycles, bicycles, and parts, n.s.k., typically for establishments with less than 10 employees (see note)	(NA)	(X)	97.6	(NA)	(X)	31.6	
3792- --	TRAVEL TRAILERS AND CAMPERS							
	Total	(NA)	(X)	1 873.7	(NA)	(X)	1 088.1	
37921 --	Travel trailers	(NA)	(X)	1 182.9	(NA)	(X)	628.0	
	Conventional travel trailers:							
37921 12	Less than 20 ft (6.096 m) in length	18	**4.0	29.2	28	8.2	44.8	
37921 14	20 ft (6.096 m) to 24 ft 11 in. (7.595 m) in length	23	(S)	94.0	25	8.4	58.4	
37921 16	25 ft (7.620 m) to 29 ft 11 in. (9.118 m) in length	21	(S)	158.4	29	10.8	90.0	
37921 18	30 ft (9.144 m) or more, including park models	40	**46.0	524.5	49	31.2	292.2	
	Fifth wheel travel trailers:							
37921 25	Less than 30 ft (9.144 m) in length	30	**11.8	158.0	24	6.7	59.9	
37921 28	30 ft (9.144 m) or more in length	33	(S)	175.3	23	3.9	56.0	
37921 00	Travel trailers, n.s.k.	(NA)	(X)	43.5	(NA)	(X)	26.8	

See footnotes at end of table.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

[Includes quantity and value of products of this industry produced by (1) establishments classified in this industry (primary) and (2) establishments classified in other industries (secondary). Transfers of products of this industry from one establishment of a company to another establishment of the same company (interplant transfers) are also included. For further explanation, see Value of Shipments in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 product code	Product	1987			1982		
		Number of companies with shipments of \$100,000 or more	Product shipments ¹		Number of companies with shipments of \$100,000 or more	Product shipments ¹	
			Quantity ²	Value (million dollars)		Quantity ²	Value (million dollars)
3792- --	TRAVEL TRAILERS AND CAMPERS—Con.						
37922 --	Camping trailers, campers, pickup covers, and parts for all travel trailers and campers	(NA)	(X)	506.8	(NA)	(X)	340.4
37922 42	Fold-down camping trailers thousands...	10	(S)	131.1	11	34.3	84.7
37922 44	Truck (pickup) campers (for sliding on and off trucks) do...	24	(S)	31.8	36	*10.6	31.5
37922 47	Truck (pickup) caps or box covers do...	40	(S)	187.8	61	**297.3	124.9
37922 61	Bodies for travel and camping trailers do...	3	(X)	2.0			
37922 63	Chassis for travel and camping trailers do...	5	(X)	90.3			
37922 69	Other parts for travel and camping trailers, pickup campers, and caps, excluding appliances and furnishings	25	(X)	55.2	42	(X)	93.6
37922 00	Camping trailers, campers, pickup covers, and parts, n.s.k.	(NA)	(X)	8.5	(NA)	(X)	5.6
37920 --	Travel trailers and campers, n.s.k.	(NA)	(X)	184.0	(NA)	(X)	119.7
37920 00	Travel and camping trailers, n.s.k., typically for establishments with 10 employees or more (see note)	(NA)	(X)	130.5	(NA)	(X)	85.1
37920 02	Travel and camping trailers, n.s.k., typically for establishments with less than 10 employees (see note)	(NA)	(X)	53.5	(NA)	(X)	34.6
3795- --	TANKS AND TANK COMPONENTS						
	Total	(NA)	(X)	3 047.8	(NA)	(X)	2 680.5
37950 --	Tanks and tank components:						
37950 01	Tanks and parts	62	(X)	1 828.8			
37950 51	Self-propelled weapons and parts	11	(X)	165.3	2	(X)	1 712.7
37950 98	Other full tracked combat vehicles and parts, including armored utility vehicles	23	(X)	1 029.1	22	(X)	944.7
37950 00	Tanks and tank components, n.s.k., typically for establishments with 10 employees or more (see note)	(NA)	(X)	24.6	(NA)	(X)	23.1
37950 02	Tanks and tank components, n.s.k., typically for establishments with less than 10 employees (see note)	(NA)	(X)	-	(NA)	(X)	-
3799- --	TRANSPORTATION EQUIPMENT, N.E.C.						
	Total	(NA)	(X)	1 587.7	(NA)	(X)	954.3
37993 --	Golf carts and industrial in-plant personnel carriers, self-propelled, and parts	(NA)	(X)	239.9	(NA)	(X)	156.8
37993 82	Self-propelled golf carts (electric and gasoline powered) for carrying passengers and/or industrial in-plant personnel carriers thousands...	8	83.4	205.6	12	68.1	139.4
37993 84	Parts for self-propelled golf carts and/or industrial in-plant personnel carriers	6	(X)	34.3	8	(X)	17.5
37993 00	Self-propelled golf carts and personnel carriers, n.s.k.	(NA)	(X)	(2)	(NA)	(X)	-
37996 --	Automobile and light truck trailers	(NA)	(X)	442.5	(NA)	(X)	272.0
37996 01	Horse trailers, excluding those pulled by truck tractors thousands...	27	(S)	63.4	27	*17.3	39.2
37996 02	Boat trailers do...	75	(S)	224.2	52	**191.8	107.4
37996 03	Motorcycle and snowmobile trailers do...	4	(S)	3.4	4	*4.8	1.7
37996 04	Mobile equipment trailers do...	16	(S)	42.7	4	**2.6	6.9
37996 08	Other, including general utility, commercial display, etc.: For transport of goods thousand...	22	(S)	38.5			
37996 09	For other uses do...	18	(S)	51.6	52	(S)	116.8
37996 00	Automobile and light truck trailers, n.s.k.	(NA)	(X)	18.7	(NA)	(X)	-
37999 --	Transportation equipment, n.e.c., including all-terrain vehicles	(NA)	(X)	584.2	(NA)	(X)	15453.2
37999 01	Self-propelled snowmobiles (electric and gasoline driven), ski-supported thousands...	3	(D)	(16)	4	*22.5	58.5
37999 02	Parts for self-propelled snowmobiles	8	(X)	(17)	4	(X)	5.4
37999 03	All-terrain vehicles, gasoline or electric driven, for transport of passengers or goods designed to traverse all types of terrain (off-the-highway operating or flotation type wheels or full tracks) thousands...	8	**45.3	60.8	12	*18.2	35.6
37999 04	Parts for all-terrain vehicles	8	(X)	8.1	10	(X)	14.2
37999 05	Trailer hitches (for travel trailers, automobile trailers, and light duty truck trailers) thousands...	9	(S)	51.9	5	(S)	17.7
37999 06	Wheelbarrows do...	2	(D)	(16)	4	**1 044.1	33.6
37999 19	Other miscellaneous transportation equipment do...	31	(S)	16310.4	42	(S)	138.7
37999 21	Parts for automobile and light truck trailers and other transportation equipment	35	(X)	17137.9	47	(X)	121.0
37999 00	Transportation equipment, n.e.c., n.s.k.	(NA)	(X)	15.1	(NA)	(X)	28.7
37990 --	Transportation equipment, n.e.c., n.s.k.	(NA)	(X)	321.1	(NA)	(X)	72.2
37990 00	Transportation equipment n.e.c., n.s.k., typically for establishments with 10 employees or more (see note)	(NA)	(X)	227.4	(NA)	(X)	52.2
37990 02	Transportation equipment, n.e.c., n.s.k., typically for establishments with less than 10 employees (see note)	(NA)	(X)	93.8	(NA)	(X)	20.0

Note: In 1987 Census of Manufactures, data for establishments of small single unit companies with up to 20 employees were estimated from administrative-record data rather than data actually collected from respondents. Employment cutoffs used for administrative records for each industry and shipments figures are included in code ending with "002". In both 1987 and 1982 Censuses of Manufactures, products not completely identified on standard forms were coded in appropriate product class (five-digit) followed by "00" or to appropriate product group code (four-digit) followed by "000".

¹Data reported by all producers, not just those with shipments of \$100,000 or more.

²For some establishments, data have been estimated from central unit values which are based on quantity-value relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * 10 to 19 percent estimated; ** 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

³For 1987, collection of data on new construction of military and nonmilitary nonpropelled ships was combined. Therefore, the 1982 data for product codes 37311 01, 37311 02, 37311 03, 37311 04, 37311 05, and 37311 06 are combined with product code 37311 09.

⁴For 1982, product codes 37313 24, 37313 25, 37313 26, 37313 32, 37313 35, and 37313 29 were combined to avoid disclosing data for individual companies.

⁵For 1982, data for product code 37313 21 were included with product code 37313 29.

⁶For 1987, data for product codes 37322 05, 37322 09, and 37322 13 are combined to avoid disclosing data for individual companies.

⁷For 1982, product codes 37322 05, 37322 07, and 37322 11 were not collected separately but were included with product code 37322 13.

⁸For 1982, data for product code 37322 09 were combined with 37322 29 to avoid disclosing data for individual companies.

Table 2. Product and Product Classes—Quantity and Value of Shipments by All Producers: 1987 and 1982—Con.

⁹For 1982, data for product codes 37322 27 and 37322 28 were not collected separately but were included with product code 37322 29.
¹⁰For 1987, collection of data on military and nonmilitary inboard motorboats was combined. Therefore, the 1982 data for product codes 37323 03, 37323 05, 37323 07, 37323 09, 37323 13, and 37323 15 are included with product code 37323 17.
¹¹For 1982, product codes 37432 11, 37432 15, and 37432 41 were combined to avoid disclosing data for individual companies.
¹²For 1982, product codes 37433 02, 37433 03, and 37433 04 were combined to avoid disclosing data for individual companies.
¹³For 1982, product code 37511 03 was combined with product code 37511 05 to avoid disclosing data for individual companies.
¹⁴For 1987, product code 37511 14 is combined with product code 37511 19 to avoid disclosing data for individual companies.
¹⁵For 1982, data for product code 37999 -- were published under Product Codes 37994 --, Snowmobiles and Parts, and 37998 --, Transportation Equipment, N.E.C., Including All-Terrain Vehicles.
¹⁶For 1987, data for product codes 37999 01 and 37999 06 are combined with product code 37999 19 to avoid disclosing data for individual companies.
¹⁷For 1987, data for product 37999 02 are combined with data for product code 37999 21 to avoid disclosing data for individual companies.

Table 3. Materials Consumed by Kind: 1987 and 1982

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 material code	Material	1987		1982	
		Quantity ¹	Delivered cost (million dollars)	Quantity ¹	Delivered cost (million dollars)
	INDUSTRY 3731, SHIP BUILDING AND REPAIRING				
	Materials, parts, containers, and supplies	(X)	2 653.5	(X)	3 958.0
	Mill shapes and forms, except castings and forgings:				
	Carbon steel:				
331011	Bar and bar shapes 1,000 s tons..	(S)	8.8	**59.3	32.4
331012	Sheet and strip	(S)	53.6	(S)	34.3
331013	Plates	*194.8	88.7	*505.1	265.0
331015	Structural shapes	126.7	49.1	128.0	65.9
331017	Wire and wire products	(S)	3.0	*21.5	15.4
331019	All other carbon steel mill shapes and forms	(S)	11.8	**59.5	31.0
331020	Alloy steel, except stainless	(D)	(D)	114.8	69.7
	Stainless steel:				
331033	Sheet and strip 1,000 s tons..	(S)	27.1	**3.4	13.6
331050	All other stainless steel mill shapes and forms	(S)	6.6	**3.3	9.5
	Copper and copper-base alloy:				
335728	Bare wire for electrical conduction only mil lb..	(S)	3.4	(S)	7.3
335102	Rod, bar, and mechanical wire, including extruded and/ or drawn shapes	**4	1.3	(S)	1.7
335003	Other	*1.2	4.4	(S)	32.5
	Aluminum and aluminum-base alloy:				
335301	Sheet, plate, and foil mil lb..	(S)	32.8	**11.9	19.6
335013	Other	*2.4	4.5	(S)	6.6
335792	Insulated copper wire and cable, except magnet wire	*4.6	14.2	(S)	22.3
	Castings, rough and semifinished:				
332001	Iron (gray and malleable) and steel 1,000 s tons..	(S)	3.2	(S)	16.1
336002	Nonferrous mil lb..	(S)	9.7	(S)	(³)
351920	Diesel and semidiesel engines thousands..	(S)	96.1	(S)	121.1
362120	Integral horsepower electric motors and generators (1 hp or more)	(S)	17.7	(S)	22.3
242103	Dressed lumber mil bd ft..	(S)	21.2	46.5	14.0
345001	Bolts, nuts, screws, rivets, and screw machine products	(X)	19.6	(X)	38.2
308007	Plastics products consumed in the form of sheets, rods, tubes, and other shapes	(X)	5.5	(X)	7.3
285101	Paints, varnishes, lacquers, shellacs, japans, enamels, and allied products	(X)	40.8	(X)	64.6
356601	Speed changers, and industrial high-speed drives	(X)	(D)	(X)	18.6
369401	Engine electrical equipment (including spark plugs, magnetos, generators, starters, etc.)	(X)	(D)	(X)	30.4
344131	Fabricated structural metal for ships and barges	(X)	205.0	(X)	103.6
344331	Boilers, condensers, and parts thereof	(X)	(D)	(X)	38.7
349271	Fluid power (hydraulic and pneumatic) valves	(X)	60.7	(X)	38.3
349261	Fluid power (hydraulic and pneumatic) hose or tube fittings and assemblies	(X)	59.4	(X)	36.2
351121	Steam engines and turbines	(X)	(D)	(X)	5.0
353101	Construction machinery and parts thereof, including shipwrenches, cranes, derricks, and capstans	(X)	90.0	(X)	206.3
362520	Industrial controls	(X)	30.5	(X)	48.7
381201	Marine navigation equipment operating by radio signal	(X)	5.8	(X)	29.5
366301	Electronic communication equipment	(X)	8.1	(X)	26.9
336004	Ship propellers and propeller nozzles	(X)	11.4	(X)	22.9
	Bearings, including mounted and unmounted:				
356218	Ball	(X)	3.1	}	7.8
356201	Roller	(X)	1.2		
970099	All other materials and components, parts, containers, and supplies	(X)	484.0	(X)	³¹ 217.1
971000	Materials, parts, containers, and supplies, n.s.k. ²	(X)	888.2	(X)	1 217.6

See footnotes at end of table.

Table 3. Materials Consumed by Kind: 1987 and 1982—Con.

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 material code	Material	1987		1982	
		Quantity ¹	Delivered cost (million dollars)	Quantity ¹	Delivered cost (million dollars)
INDUSTRY 3732, BOAT BUILDING AND REPAIRING					
	Materials, parts, containers, and supplies	(X)	2 800.3	(X)	1 163.0
	Mill shapes and forms, except castings and forgings:				
	Carbon steel:				
331011	Bar and bar shapes	(S)	5.6	(S)	1.1
331012	Sheet and strip	(S)	2.8	**4.3	3.2
331013	Plates	(S)	1.7	*20.2	10.3
331015	Structural shapes	(S)	1.9	**3.8	1.4
331019	All other carbon steel mill shapes and forms	(S)	2.8	1.1	1.6
331031	Stainless steel	(S)	6.1	1.6	1.9
335105	Copper and copper-base alloy	(D)	(⁴)	(S)	.5
	Aluminum and aluminum-base alloy:				
335301	Sheet, plate, and foil	27.0	27.4	16.9	17.1
335405	Extruded shapes, rod, bar, pipe, etc.	(S)	28.4	(S)	9.4
335008	All other aluminum mill shapes and forms (wire, rolled rod, etc.)	(S)	2.6	(S)	1.1
335792	Insulated copper wire and cable, except magnet wire (quantity of copper content)	(S)	8.9	**1.6	2.0
	Castings (rough and semifinished):				
332001	Iron (gray and malleable) and steel	(S)	4.1	(S)	1.1
336002	Nonferrous	(S)	3.0	(S)	9.1
	Engines:				
351920	Diesel and semidiesel	(S)	80.9	**9.6	65.8
351901	Gasoline and other carburetor	145.7	511.0	32.2	97.1
362120	Integral horsepower electric motors and generators (1 hp or more)	(S)	19.3	*2.4	5.7
369401	Engine electrical equipment, including spark plugs, magnetos, generators, starters, etc.	(X)	9.3	(X)	6.8
356601	Speed changers, gears, and industrial high-speed drivers	(X)	1.7	(X)	1.3
356831	Drive shafts and couplings	(X)	5.7	(X)	2.4
356832	Transmissions and gear drives	(X)	6.0	(X)	3.8
336001	Boat propellers	**135.5	13.6	(S)	4.6
242103	Dressed lumber	(S)	45.7	(S)	15.4
243056	Plywood	(X)	60.4	(X)	21.3
282104	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc., but excluding sheets, rods, tubes, and shapes	**185.7	116.4	**59.7	35.8
308007	Plastics products consumed in the form of sheets, rods, tubes, and other shapes	(X)	25.8	(X)	6.9
306902	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets	(X)	6.7	(X)	3.3
322931	Glass fiber (textile type, bonded mat type, etc.)	(S)	110.2	(S)	41.2
285101	Paints, lacquers, varnishes, enamels, japans, and shellacs	(S)	29.4	(S)	17.1
345001	Bolts, nuts, screws, rivets, and screw machine products	(X)	24.4	(X)	9.7
342971	Marine hardware (including shackles, rope shackles, rope sockets, tackle blocks, rope clips, clamps, etc.)	(X)	118.0	(X)	42.4
356151	Bilge pumps	(X)	12.0	(X)	1.6
227001	Carpeting	(X)	41.4	(X)	6.8
239401	Canvas products	(X)	28.0	(X)	8.7
381201	Marine nautical and navigation equipment operating by radio signal	(X)	28.6	(X)	3.9
970099	All other materials and components, parts, containers, and supplies	(X)	*388.6	(X)	190.6
971000	Materials, parts, containers, and supplies, n.s.k. ²	(X)	1 021.4	(X)	511.0
INDUSTRY 3743, RAILROAD EQUIPMENT					
	Materials, parts, containers, and supplies	(X)	1 030.8	(X)	1 646.1
	Mill shapes and forms, except castings and forgings:				
	Carbon steel:				
331011	Bars and bar shapes	*31.7	17.3	**34.3	17.5
331012	Sheet and strip	*49.3	23.5	*61.0	29.4
331013	Plates	129.7	61.4	*196.0	106.3
331015	Structural shapes	25.8	12.5	*43.2	23.6
331017	Wire and wire products	(S)	1.9	**16.1	3.1
331019	All other carbon steel mill shapes and forms	*15.3	7.4	(S)	9.0
331020	Alloy steel, except stainless	**2.5	2.1	(S)	4.0
331031	Stainless steel	**1.9	2.9	*9.6	17.8
335105	Copper and copper-base alloy	12.4	16.5	(S)	22.5
335001	Aluminum and aluminum-base alloy	(S)	5.3	(S)	3.8
	Castings (rough and semifinished):				
332011	Iron (gray and malleable)	32.9	37.1	41.9	43.3
332045	Steel	(S)	38.7	**80.7	90.4
336005	Aluminum and aluminum-base alloy	(S)	4.3	4.5	3.7
336003	Other nonferrous	(S)	4.2	(⁵)	(⁵)
335602	Welding rod	(S)	3.9	*8.5	4.5
	Iron and steel forgings:				
346202	Wheels and axles	(S)	38.1	*76.4	50.7
346203	Other	*24.0	24.4	*63.5	46.7
362120	Integral horsepower electric motors and generators (1 hp or more)	(S)	34.3	11.1	55.0
356201	Roller bearings (including mounted and unmounted)	(X)	22.9	(X)	31.9
356810	Plain bearings and bushings	(X)	11.9	(X)	6.4
356601	Speed changers, gears, and industrial high-speed drivers	(X)	19.6	(X)	60.5
361302	Railway electrical control equipment	(X)	220.1	(X)	(⁵)
285101	Paints, varnishes, lacquers, shellacs, japans, enamels, and allied products	(S)	6.3	(S)	9.2
345001	Bolts, nuts, screws, washers, rivets, and screw machine products	(X)	19.2	(X)	17.9
374001	Brake equipment, truck assemblies, hooks and other coupling devices, buffers, and parts thereof	(X)	93.8	(X)	(⁵)

See footnotes at end of table.

Table 3. **Materials Consumed by Kind: 1987 and 1982—Con.**

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 material code	Material	1987		1982	
		Quantity ¹	Delivered cost (million dollars)	Quantity ¹	Delivered cost (million dollars)
	INDUSTRY 3743, RAILROAD EQUIPMENT—Con.				
970099	All other materials and components, parts, containers, and supplies.....	(X)	109.5	(X)	\$685.8
971000	Materials, parts, containers, and supplies, n.s.k. ²	(X)	191.8	(X)	303.1
	INDUSTRY 3751, MOTORCYCLES, BICYCLES, AND PARTS				
	Materials, parts, containers, and supplies	(X)	607.6	(X)	836.
	Mill shapes and forms, except castings and forgings:				
	Carbon steel:				
331011	Bars and bar shapes 1,000 s tons..]	35.4	50.7	23.9
331012	Sheet and strip do..			(S)	72.4
331004	All other do..			(S)	13.2
336005	Aluminum and aluminum-base alloy castings mil lb..	(S)	11.2	(S)	4.2
356218	Ball bearings, mounted and unmounted.....	(D)	(D)	(X)	2.0
282104	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc., but excluding sheets, rods, tubes, and shapes mil lb..	(S)	2.4	(S)	4.3
308007	Plastics products consumed in the form of sheets, rods, tubes, and other shapes.....	(D)	(D)	(X)	5.8
285101	Paints, varnishes, lacquers, shellacs, japans, enamels and allied products 1,000 gal..	(S)	2.9	(S)	7.4
301101	Pneumatic tires and inner tubes mil tires..	(S)	20.8	(S)	54.2
351901	Internal combustion engines, gasoline thousands..	(D)	(D)	(S)	172.8
375111	Frames, forks, and parts thereof, bicycle	(X)	29.9	(X)	(⁹)
375112	Wheel rims and spokes, bicycle	(X)	7.7	(X)	(⁹)
375113	Hubs, bicycle	(X)	5.4	(X)	(⁹)
375114	Brakes, bicycle	(X)	(D)	(X)	(⁹)
375115	Seats (saddles), bicycle	(X)	8.3	(X)	(⁹)
375116	Pedals and crank gear and parts thereof, bicycle	(X)	(D)	(X)	(⁹)
375121	Seats (saddles), motorcycle	(X)	(D)	(X)	(⁹)
970099	All other materials and components, parts, containers, and supplies.....	(X)	169.1	(X)	\$342.0
971000	Materials, parts, containers, and supplies, n.s.k. ²	(X)	110.5	(X)	133.8
	INDUSTRY 3792, TRAVEL TRAILERS AND CAMPERS				
	Materials, parts, containers, and supplies	(X)	1 146.2	(X)	779.2
	Mill shapes and forms, except castings and forgings:				
	Carbon steel:				
331011	Bars and bar shapes 1,000 s tons..]	35.8	(S)	2.1
331012	Sheet and strip do..			(S)	7.4
331015	Structural shapes do..			(S)	8.4
331019	All other carbon steel mill shapes and forms..... do..	(S)	4.6	(S)	.8
331020	Alloy steel, except stainless..... do..	(D)	(⁷)	(S)	1.8
331031	Stainless steel..... do..	(D)	(⁷)	**4	.8
335105	Copper and copper-base alloy mil lb..	(D)	(⁷)	(S)	1.3
	Aluminum and aluminum-base alloy:				
335301	Sheet, plate, and foil mil lb..	(S)	25.7	(S)	24.7
335011	All other do..	(S)	23.3	(S)	22.5
335792	Insulated copper wire and cable, except magnet wire (quantity of copper content) do..	(S)	2.7	**1.7	2.2
	Castings (rough and semifinished):				
332045	Steel 1,000 s tons..	(S)	6.9	(S)	.5
336005	Aluminum and aluminum-base alloy mil lb..	(D)	(⁷)	(S)	.6
243056	Plywood	(X)	52.4	(X)	37.9
242103	Dressed lumber mil bd ft..	(S)	42.5	(S)	19.1
243011	Millwork, including wood doors, window sashes, moldings, and cabinets	(X)	20.7	(X)	14.7
344401	Fabricated sheet metal products, except stampings.....	(X)	18.5	(X)	8.5
282104	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc. mil lb..	(S)	7.5	(S)	6.9
308007	Plastics products consumed in the form of sheets, rods, tubes, and other shapes.....	(X)	11.9	(X)	-
308006	Fabricated plastics products, except gaskets.....	(X)	12.6	(X)	16.4
320102	Glass and glass products, including windows and mirrors.....	(X)	32.9	(X)	25.6
345001	Bolts, nuts, screws, rivets, and screw machine products	(X)	16.7	(X)	9.4
344201	Metal doors and door units, windows and window units.....	(X)	49.8	(X)	24.3
343201	Metal plumbing fixtures, fittings, and trim, including enameled	(X)	22.2	(X)	6.4
371411	Trailer axles, wheels, brakes, undercarriages, and other metal vehicular parts	(X)	83.4	(X)	40.5
227001	Carpeting	(X)	9.8	(X)	7.5
239101	Curtains and draperies	(X)	15.5	(X)	10.6
285101	Paints, varnishes, lacquers, shellacs, japans, enamels, and allied products..... 1,000 gal..	(S)	13.4	(S)	5.6
229501	Coated, impregnated, and laminated fabrics mil lin yd..	(S)	4.0	**15.8	8.0
343301	Heating equipment, except electric.....	(X)	14.0	(X)	14.2
363001	Household appliances, including refrigerators, cooking equipment, and other household appliances except air-conditioners	(X)	61.1	(X)	44.1
358503	Air-conditioning equipment	(X)	16.0	(X)	9.9
364300	Current-carrying wiring devices	(X)	13.0	(X)	8.2
371121	Purchased chassis for motor homes millions..	(S)	22.4	(S)	36.1
301101	Pneumatic tires and inner tubes mil tires..	(S)	8.6	(S)	10.9
970099	All other materials and components, parts, containers, and supplies.....	(X)	7129.0	(X)	114.8
971000	Materials, parts, containers, and supplies, n.s.k. ²	(X)	369.3	(X)	226.6

See footnotes at end of table.

Table 3. Materials Consumed by Kind: 1987 and 1982—Con.

[Includes quantity and cost of materials consumed or put into production by establishments classified only in this industry. For further explanation, see Cost of Materials in appendix. For meaning of abbreviations and symbols, see introductory text]

1987 material code	Material	1987		1982	
		Quantity ¹	Delivered cost (million dollars)	Quantity ¹	Delivered cost (million dollars)
	INDUSTRY 3795, TANKS AND TANK COMPONENTS				
	Materials, parts, containers, and supplies -----	(X)	1 448.2	(X)	1 369.8
	Mill shapes and forms (except castings and forgings):				
331001	Carbon steel ----- 1,000 s tons..	(S)	90.9	(D)	(D)
331020	Alloy steel, except stainless ----- do..	**25.2	25.6	(D)	(D)
331031	Stainless steel ----- do..	(S)	.7	(D)	(D)
335105	Copper and copper-base alloy ----- mil lb..	(S)	1.0	(D)	(D)
335007	Aluminum and aluminum-base alloy ----- do..	(D)	(⁸)	(D)	(D)
289900	Foundry chemicals, metal treating compounds, and plating compounds -----	(X)	(⁸)	(X)	(⁸)
339915	Metal powders ----- mil lb..	(D)	(⁸)	-	-
	Castings (rough and semi-finished):				
332011	Iron (gray and malleable) ----- 1,000 s tons..	(D)	(⁸)	(S)	20.0
332045	Steel ----- do..	(S)	25.4	(D)	(D)
336005	Aluminum and aluminum-base alloy ----- mil lb..	(S)	7.4	(D)	(D)
	Forgings:				
346200	Iron and steel ----- 1,000 s tons..	(D)	(⁸)	(S)	33.4
346310	Aluminum and aluminum-base alloy ----- mil lb..	(D)	(⁸)	(D)	(D)
	Bearings, including mounted and unmounted:				
356218	Ball -----	(X)	(⁸)	(X)	.8
356201	Roller -----	(X)	(⁸)	(X)	-
345001	Bolts, nuts, screws, rivets, and screw machine products ----- mil bd ft..	(X)	(⁸)	(X)	(⁸)
242101	Rough and dressed lumber -----	(D)	(⁸)	(D)	(D)
349940	Fabricated metal products -----	(X)	(⁸)	(X)	(⁸)
265001	Paperboard containers, boxes and corrugated paperboard ----- 1,000 s tons..	(D)	(⁸)	(D)	(D)
308006	Fabricated plastics products, except gaskets -----	(X)	(⁸)	(X)	(⁸)
282104	Plastics resins consumed in the form of granules, pellets, powders, liquids, etc., but excluding sheets, rods, tubes, and shapes ----- mil lb..	(D)	(⁸)	(D)	(D)
970099	All other materials and components, parts, containers, and supplies -----	(X)	*1 270.7	(X)	*443.0
971000	Materials, parts, containers, and supplies, n.s.k. ² -----	(X)	26.4	(X)	509.4
	INDUSTRY 3799, TRANSPORTATION EQUIPMENT, N.E.C.				
	Materials, parts, containers, and supplies -----	(X)	914.7	(X)	469.4
	Mill shapes and forms, except castings and forgings:				
	Carbon steel:				
331011	Bars and bar shapes ----- 1,000 s tons..	(S)	29.2	**21.6	13.6
331012	Sheet and strip ----- do..	*95.9	50.2	(S)	23.9
331013	Plates ----- do..	*12.6	6.9	(S)	1.9
331015	Structural shapes ----- do..	(S)	21.0	(S)	9.9
331017	Wire and wire products ----- do..	(S)	1.4	(S)	3.3
331019	All other carbon steel mill shapes and forms ----- do..	(S)	10.0	2.0	1.5
331025	Alloy steel, including stainless ----- do..	(S)	.7	(S)	.8
	Aluminum and aluminum-base alloy:				
335301	Sheet, plate, and foil ----- mil lb..	(S)	4.8	*3.3	4.9
335405	Extruded shapes, including extruded rod, bar, pipe, tube, etc. ----- do..	**227.4	12.1	(S)	8.2
335008	All other aluminum mill shapes and forms (wire, rolled rod and bar, powder, welded tubing, etc.) ----- do..	(S)	.7	(S)	2.9
	Castings (rough and semifinished):				
332045	Steel ----- 1,000 s tons..	(S)	3.8	(S)	4.5
336005	Aluminum and aluminum-base alloy castings ----- mil lb..	(S)	9.6	(D)	(¹⁰)
346200	Iron and steel forgings ----- 1,000 s tons..	(S)	3.8	*1.4	3.0
306902	Fabricated rubber products, except tires, tubes, hose, belting, and gaskets -----	(X)	6.0	(X)	3.9
305201	Rubber and plastics hose and belting -----	(X)	4.8	(X)	(¹¹)
308007	Plastics products consumed in the form of sheets, rods, tubes, and other shapes -----	(X)	21.6	(X)	3.7
285101	Paints, varnishes, lacquers, shellacs, japans, enamels, and allied products ----- 1,000 gal..	(S)	12.2	(S)	6.3
301101	Pneumatic tires and inner tubes ----- mil tires..	(S)	24.3	(S)	14.2
351901	Internal combustion engines, gasoline ----- thousands..	(S)	83.2	50.3	12.0
371411	Trailer axles, wheels, brakes, undercarriages, and other metal vehicular parts -----	(X)	160.4	(X)	36.6
970099	All other materials and components, parts, containers, and supplies -----	(X)	233.9	(X)	¹⁰ ¹¹ 159.7
971000	Materials, parts, containers, and supplies, n.s.k. ² -----	(X)	214.0	(X)	154.6

¹For some establishments, data have been estimated from central unit values which are based on quantity-cost relationships of reported data. The following symbols are used when percentage of each quantity figure estimated in this manner equals or exceeds 10 percent of published figure: * 10 to 19 percent estimated; ** 20 to 29 percent estimated. If 30 percent or more is estimated, figure is replaced by (S).

²Total cost of materials of establishments that did not report detailed materials data, including establishments that were not mailed a form.

³For 1982, material code 336002 was combined with material code 970099 to avoid disclosing data for individual companies.

⁴For 1987, material code 335105 is combined with material code 970099 to avoid disclosing data for individual companies.

⁵For 1982, material codes 336003, 361302, and 374001 are combined with material code 970099 to avoid disclosing data for individual companies.

⁶For 1982, material codes 375111, 375112, 375113, 375114, 375115, 375116, and 375121 were not collected separately but were included with material code 970099.

⁷For 1987, material codes 331020, 331031, 335105, and 336005 are combined with material code 970099 to avoid disclosing data for individual companies.

⁸For 1987, material codes 335007, 289900, 339915, 332011, 346200, 346310, 356218, 356201, 345001, 242101, 349940, 265001, 308006, and 282004 are combined with material code 970099 to avoid disclosing data for individual companies.

⁹For 1982, material codes 389900, 308006, 245001, and 349940 were not collected separately but were included with material code 970099.

¹⁰For 1982, material code 336005 was combined with material code 970099 to avoid disclosing data for individual companies.

¹¹For 1982, material code 305201 was not collected separately but was included with material code 970099.



APPENDIX

Scope and Coverage and Explanation of Terms

GENERAL

The 1987 Census of Manufactures is the 32nd census of manufacturing establishments conducted in the United States. For 1987, it was conducted as part of the economic censuses, which included the censuses of mineral industries, construction industries, retail and wholesale trades, service industries, selected transportation activities, and minority-owned and women-owned businesses, under authority of title 13 of the United States Code. Title 13 specifies that an economic census be conducted every 5 years to cover years ending in 2 and 7.

SCOPE AND COVERAGE

Establishment Basis of Reporting

The census of manufactures is conducted on an establishment basis. All manufacturing establishments with one paid employee or more at any time during the year are covered by the census of manufactures. Therefore, a company operating at more than one location is required to file a separate report for each location. This report excludes information for separately operated administrative offices, warehouses, garages, and other auxiliary units which service manufacturing establishments of the same company. Where these auxiliary operations are conducted at the same location as the manufacturing operation, they are usually included in the report for the operating manufacturing establishment.

Use of Administrative Records

From a universe of approximately 350,000 manufacturing establishments in the 1987 Census of Manufactures, approximately 150,000 small single-establishment companies were excused from filing reports. Selection of the small establishment nonmail cases was done on an industry-by-industry basis. A variable cutoff was used to determine those establishments for which administrative records were to be used in place of a census report. The cutoffs were selected so the administrative-record cases would account for approximately 3 percent or less of the value of shipments for the industry. These cutoffs were then adjusted so that all single-establishment companies with less than 5 employees were excluded from the mail canvass, while all establishments with more than 20 employees were included. Where establishments in the 5 to 20 employee size range were included in the mail canvass, an abbreviated census form was frequently used.

For these nonmail establishments, (and a small number of larger establishment whose reports were not received at the time the data were tabulated) data on employment, payroll, and receipts were obtained from administrative records of other government agencies rather than from census forms. The administrative-record information was then used in conjunction with industry averages to estimate the data for these establishments. The value of shipments and cost of materials were not distributed among specific products and materials but were included in the product and material "not specified by kind" (n.s.k.) categories.

EXPLANATION OF TERMS

Number of establishments and companies—A separate report was required for each manufacturing establishment (plant) with one employee or more. An establishment is defined as a single physical location where manufacturing is performed. A company, on the other hand, is defined as a business organization consisting of one establishment or more under common ownership or control.

All employees—Includes all full-time and part-time employees on the payrolls at any time during the year. Included are all persons on paid sick leave, paid holidays, and paid vacations. Officers of corporations are included as employees; proprietors and partners of unincorporated firms are excluded. The "all employees" number is the average number of production workers plus the number of other employees in mid-March. The number of production workers is the average of those for midmonth payroll periods of March, May, August, and November.

Production workers—Includes workers up through the working-supervisor level engaged in fabricating, processing, assembling, inspecting, receiving, packing, warehousing, shipping (but not delivering), maintenance, repair, janitorial, guard services, product development, auxiliary production for plant's own use (e.g., power-plant), recordkeeping, and other closely associated services. Truckdrivers delivering ready-mixed concrete are also included in production workers.

Other employees—Includes nonproduction personnel, including those engaged in the following activities: supervision above working-supervisor level, sales (including driver/salespersons), sales delivery (truckdrivers and helpers), advertising, credit collection, installation and

servicing of own product, clerical and routine office functions, executive, purchasing, finance, legal, personnel (including cafeteria, etc.), professional, and technical employees.

Payroll—Includes the gross earnings for the “employees” defined above, such as salaries, wages, commissions, dismissal pay, bonuses, vacation and sick leave pay, and compensation in kind, prior to such deductions as employees’ Social Security contributions, withholding taxes, group insurance, union dues, and savings bonds. Respondents were told that in reporting they could follow the definition of payrolls used for calculating the Federal withholding tax.

Production-worker hours—Covers hours worked or paid for at the plant, including actual overtime hours (not straight-time equivalent hours). It excludes hours paid for vacations, holidays, or sick leave when the employee was not at the plant.

Cost of materials—Refers to direct charges actually paid or payable for items consumed or put into production during the year, including freight charges and other direct charges incurred by the establishment in acquiring these materials. It includes the cost of materials or fuels consumed, regardless of whether they were purchased by the individual establishment from other companies, transferred to it from other establishments of the same company, or withdrawn from inventory during the year.

The important components of this cost item are (a) all raw materials, semifinished goods, parts, containers, scrap, and supplies put into production or used as operating supplies and for repair and maintenance during the year; (b) electric energy purchased; (c) fuels consumed for heat, power, or generating electricity; (d) work done by others on materials or parts furnished by manufacturing establishments (contract work); and (e) products bought and resold in the same condition.

Specific materials consumed (table 3)—In addition to the total cost of materials which every establishment was required to report, information was also collected for most manufacturing industries on the consumption of major materials used in manufacturing. These inquiries were restricted to those materials which were important parts of the cost of production in a particular industry and for which cost information was available from manufacturers’ records. Establishments consuming less than a specified amount (usually \$10,000) of a specific material were not requested to report consumption of that material separately. Also, the cost of materials for the small establishments for which administrative records were used was estimated as “not specified by kind” (n.s.k.).

Value of shipments and other receipts—Generally refers to received or receivable net selling values, f.o.b. plant (exclusive of freight and taxes), of all products shipped, both primary and secondary, as well as all

miscellaneous receipts such as receipts for contract work performed for others, installation and repair receipts, sale of scrap, and sale of products bought and resold without further processing. Included are all items made by or for the establishment from materials owned by it whether sold, transferred to other plants of the same company, or shipped on consignment. The net selling value of products made in one plant on a contract basis from materials owned by another was reported by the plant providing the materials.

In a few industries, the value of production or value of work completed is used instead of value of shipments. These industries are identified in the introduction and are footnoted in table 1.

In the case of multiunit companies, the manufacturer was requested to report the value of products transferred to other establishments of the same company at full economic or commercial value, that is, including not only the direct costs of production but also a reasonable proportion of “all other costs” (including company overhead and profit).

Shipments or production of individual products (table 2)—In the 1987 census, detailed shipment information was collected for approximately 11,000 individual products. These products are identified by a seven-digit code and are grouped into approximately 1,500 classes of products, which in turn are primary to 459 four-digit industries. Data at the five-digit product-class level have been collected each year as part of the annual survey of manufactures. Information at the seven-digit level, collected for many industries in the current industrial reports program, is not included in this table.

Value added by manufacture—This measure of manufacturing activity is derived by subtracting the cost of materials, supplies, containers, fuel, purchased electricity, and contract work from the value of shipments for products manufactured plus receipts for services rendered. The result of this calculation is then adjusted by the addition of value added by merchandising operations (that is, the difference between the sales value and cost of merchandise sold without further manufacturing, processing, or assembly) plus the net change in finished goods and work-in-process inventories between the beginning and end of the year.

For those industries where value of production is collected instead of value of shipments (see footnote in table 1), value added is adjusted only for the change in work-in-process inventories between the beginning and end of the year. For those industries where value of work done is collected, the value added does not include an adjustment for the change in finished goods or work-in-process inventories.

Value added avoids the duplication in the figure for value of shipments which results from the use of products of some establishments as materials by others. Value

added is considered to be the best value measure available for comparing the relative economic importance of manufacturing among industries and geographic areas.

Expenditures for new plant and equipment—Establishments in operation and any known plants under construction were asked to report their expenditures for (a) permanent additions and major alterations to manufacturing establishments and (b) new machinery and equipment used for replacement and additions to plant capacity if they are of the type for which depreciation accounts are ordinarily maintained.

These totals exclude expenditures for used plant and equipment, expenditures for land, and cost of maintenance and repairs charged as current operating expenses. Data for used plant and equipment will be published in the final industry bulletin.

End-of-year inventories—Comprised of (a) finished products; (b) work-in-process; and (c) materials, supplies, fuels, etc. Beginning in 1982, respondents were asked to report their inventories at (the lower of) cost or market prior to adjustment to LIFO cost. This is a change from prior years in which respondents were permitted to value their inventories using any generally accepted accounting method.

Therefore, 1982 through 1987 data for inventories are not strictly comparable to prior-year data.

Specialization and coverage ratios—An establishment is classified in a particular industry if its shipments of primary products of the industry exceed in value its shipments of the products of any other single industry. An establishments' shipments include those products assigned to an industry (primary products), those considered primary to other industries (secondary products), and receipts for miscellaneous activities (merchandising, contract work, resales, etc.). The following ratios have been developed to measure the relationship of primary product shipments to the data on shipments for the industry shown in table 1 and data on product shipments shown in table 2.

Specialization ratio—Represents the ratio of primary product shipments to total product shipments (primary and secondary, excluding miscellaneous receipts) for the establishments classified in the industry.

Coverage ratio—Represents the ratio of primary products shipped by the establishments classified in the industry to the total shipments of such products that are shipped by all manufacturing establishments, wherever classified.

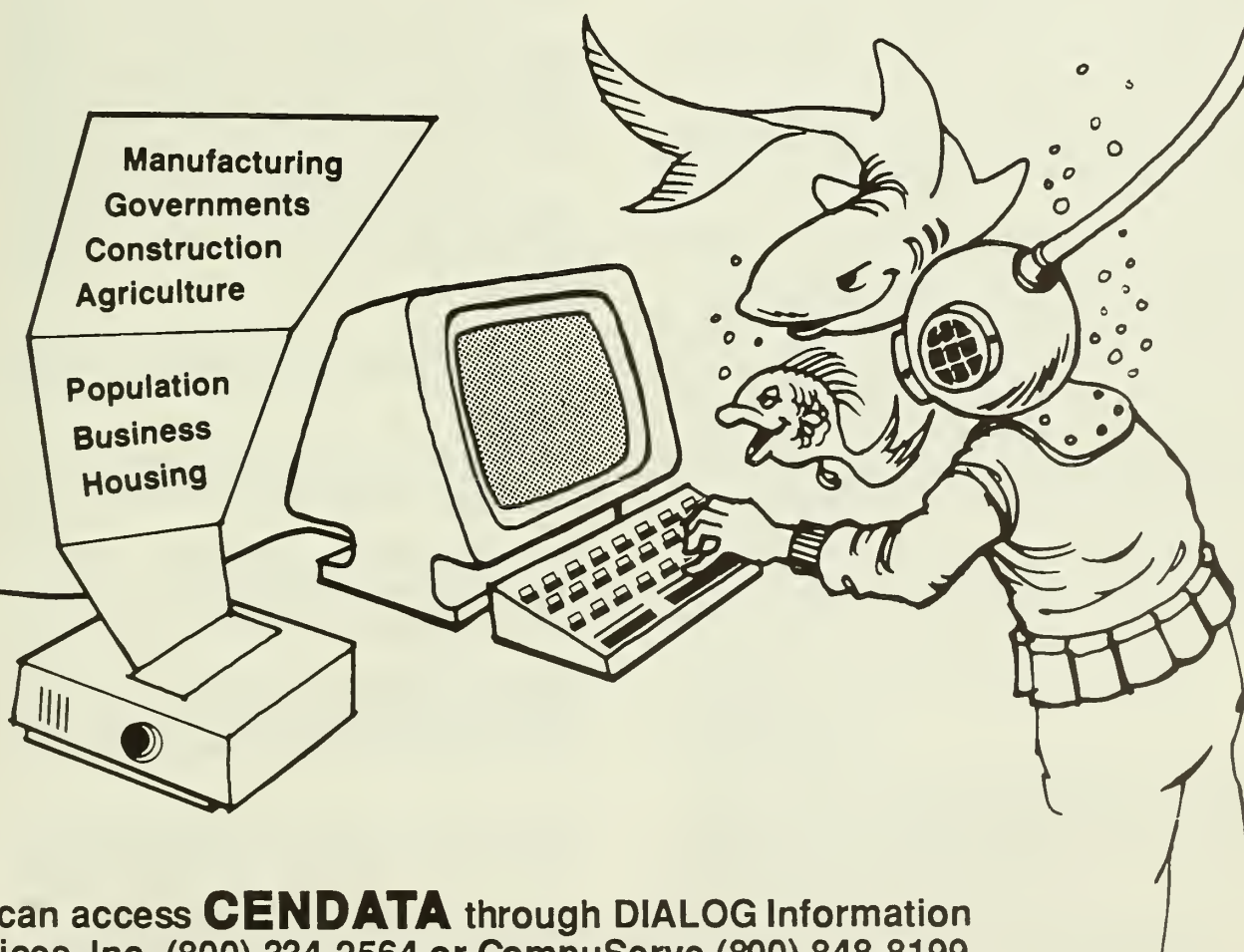


WHAT'S YOUR LINE?

It's ONLINE!

NOW whatever you do, wherever you go, we've got data for you.
In more depth than ever—

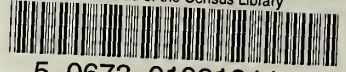
CENDATATM—the Census Bureau's online system—instantly provides the facts you need for decisions in virtually every area. It covers everything from ingots to elections, from rental vacancies to retail sales, from median family income to milk cows in Minnesota.



You can access **CENDATA** through DIALOG Information Services, Inc. (800) 334-2564 or CompuServe (800) 848-8199. Or call the Census Bureau on (301) 763-2074 for more information.

Now key statistics are just a phone call away.

CB/Bureau of the Census Library



5 0673 01031344 6

No